



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,882	09/29/2003	Bo Goransson	2380-783	5364
23117	7590	06/19/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			MILLER, BRANDON J	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/671,882	Applicant(s) GORANSSON, BO	
	Examiner Brandon J. Miller	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Labonte (US 6,259,918 B1).

Regarding claim 1 Labonte teaches a method for handing over a mobile station connection (see col. 7, lines 1-4). Labonte teaches receiving one or more downlink signal quality measurements associated with one or more neighboring base stations (see col. 7, lines 5-15). Labonte teaches determining a target base station based on the one or more signal quality measurements (see col. 7, lines 19-23 and col. 8, lines 13-22 & 36-41). Labonte teaches determining a desired antenna beam from plural antenna beams at the target base station for communicating with the mobile station (see col. 8, lines 22-29). Labonte teaches establishing a handover connection between the target base station and the mobile station using the desired antenna beam at the target base station (see col. 8, lines 47-55).

Regarding claim 2 Labonte teaches determining the location of the mobile station, and determining the desired antenna beam using the determined location (see col. 3, lines 35-40 and col. 8, lines 55-58).

Regarding claim 3 Labonte teaches signal quality measurements that are for a signal broadcast over an entire cell (see col. 7, lines 5-12 and col. 9, lines 17-20). Labonte teaches

Art Unit: 2617

establishing a radio link between the target base station and the mobile station using the broadcast signal, and thereafter, determining the desired antenna beam at the target base station (see col. 8, lines 47-55). Labonte teaches reconfiguring the radio link to use the desired antenna beam (see col. 8, lines 55-65).

Regarding claim 4 Labonte teaches reconfiguring from a first phase reference associated with a broadcast signal to a second phase reference associated with a desired antenna beam (see col. 49-58).

Regarding claim 5 Labonte teaches requesting from the target base station one or more uplink signal quality measurements associated with the mobile station for multiple antenna beams (see col. 5, lines 62-66 and col. 8, lines 17-29).

Regarding claim 6 Labonte teaches determining which antenna beam at the target base station is desired for the mobile station connection using the one or more uplink signal quality measurements (see col. 5, lines 62-66 and col. 8, lines 17-29). Labonte teaches setting up a radio link between the desired antenna beam and the mobile station (see col. 8, lines 55-65).

Regarding claim 7 Labonte teaches wherein the desired antenna beam covers an area where the mobile station is currently located or where the mobile station is predicted to be located (see col. 3, lines 35-40 and col. 8, lines 55-63).

Regarding claim 8 Labonte teaches wherein the desired antenna beam covers an area closest to where the mobile station is currently located or where the mobile station is predicted to be located (see col. 3, lines 35-40 and col. 8, lines 55-63).

Regarding claim 9 Labonte teaches wherein the handover is a soft or softer handover (see col. 6, lines 52-57).

Regarding claim 10 Labonte teaches wherein the handover is a hard handover (see col. 8, lines 58-67 and col. 9, lines 1-2).

Regarding claim 11 Labonte teaches wherein the target base station includes one or more first antennas for transmitting a first type of signal using a wide antenna beam, the signal quality of which is detected by mobile stations for purposes of providing downlink signal quality messages (see col. 4, lines 5-10 and col. 7, lines 5-15). Labonte teaches one or more second antennas for transmitting a second type of signal using an antenna beam narrower than the wide antenna beam (see col. 4, lines 10-15).

Regarding claim 12 Labonte teaches a radio network controller for use in establishing a handover connection between a mobile station and a target radio base station (see col. 5, lines 25-32 and col. 7, lines 1-4). Labonte teaches a memory for storing one or more downlink signal quality measurements associated with one or more neighboring base stations (see col. 7, lines 5-15 & 19-21). Labonte teaches processing circuitry configured to perform the determining the target base station based on the one or more signal quality measurements stored in memory (see col. 7, lines 19-23 and col. 8, lines 13-22 & 36-41). Labonte teaches determining a desired antenna beam from plural antenna beams at the target base station for communicating with the mobile station (see col. 8, lines 22-29). Labonte teaches establishing a handover connection between the target base station and the mobile station using the desired antenna beam at the target base station (see col. 8, lines 47-55).

Regarding claim 13 Labonte teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 14 Labonte teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 15 Labonte teaches a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 16 Labonte teaches a device as recited in claim 5 and is rejected given the same reasoning as above.

Regarding claim 17 Labonte teaches a device as recited in claim 6 and is rejected given the same reasoning as above.

Regarding claim 18 Labonte teaches a device as recited in claim 7 and is rejected given the same reasoning as above.

Regarding claim 19 Labonte teaches a device as recited in claim 8 and is rejected given the same reasoning as above.

Regarding claim 20 Labonte teaches a device as recited in claim 9 and is rejected given the same reasoning as above.

Regarding claim 21 Labonte teaches a device as recited in claim 10 and is rejected given the same reasoning as above.

Regarding claim 22 Labonte teaches a device as recited in claim 11 and is rejected given the same reasoning as above.

Regarding claim 23 Labonte teaches a radio network controller (see col. 5, lines 25-32).

Regarding claim 24 Labonte teaches an apparatus for handing over a mobile station connection (see col. 7, lines 1-4). Labonte teaches receiving one or more downlink signal quality measurements associated with one or more neighboring base stations (see col. 7, lines 5-15).

Art Unit: 2617

Labonte teaches determining a target base station based on the one or more signal quality measurements (see col. 7, lines 19-23 and col. 8, lines 13-22 & 36-41). Labonte teaches determining a desired antenna beam from plural antenna beams at the target base station for communicating with the mobile station (see col. 8, lines 22-29). Labonte teaches establishing a handover connection between the target base station and the mobile station using the desired antenna beam at the target base station (see col. 8, lines 47-55).

Regarding claim 25 Labonte teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 26 Labonte teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 27 Labonte teaches a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 28 Labonte teaches a device as recited in claim 5 and is rejected given the same reasoning as above.

Regarding claim 29 Labonte teaches a device as recited in claim 6 and is rejected given the same reasoning as above.

Regarding claim 30 Labonte teaches a device as recited in claim 7 and is rejected given the same reasoning as above.

Regarding claim 31 Labonte teaches a device as recited in claim 8 and is rejected given the same reasoning as above.

Regarding claim 32 Labonte teaches a device as recited in claim 9 and is rejected given the same reasoning as above.

Art Unit: 2617

Regarding claim 33 Labonte teaches a device as recited in claim 10 and is rejected given the same reasoning as above.

Regarding claim 34 Labonte teaches a device as recited in claim 11 and is rejected given the same reasoning as above.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 23 recites the limitation "the radio network controller in claim 11" in lines 1-2.

There is insufficient antecedent basis for this limitation in the claim.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lyer et al. U.S Patent No. 6,295,450 B1 discloses a method and apparatus for transferring communication within a communication system.

Labeledz U.S. Patent No. 6,119,010 discloses a method and apparatus for adjusting channel powers in a wireless communication system based on a predicted mobile location.

Searle et al. U.S Patent No. 5,714,957 discloses a base station antenna arrangement.

Tigerstedt et al. Pub. No.: U.S 2004/0121770 A1 discloses a handover method, system and radio network controller.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869.

The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.


Art Unit: 2617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



June 9, 2006



GEORGE ENG
SUPERVISORY PATENT EXAMINER